

IN THE CLAIMS:

1. (Currently Amended) A method for matching orders by employing at least one computer comprising the steps of:
receiving a plurality of orders from a plurality of participants to buy and/or sell a plurality of products, each order being a unilateral order from one of said participants identifying a number of units of one of said products to buy or sell;
setting swap prices for said products; and
matching units of said orders based on constrained net activity for said participants and said products to maximize a number of units matched to obtain matched orders and unmatched orders, said matching independent of said swap prices.
2. (Original) A method as in claim 1, wherein said matching based on constrained net activity for said participants comprises matching units of orders such that a number of units to buy for a participant equals a number of units to sell for said participant.
3. (Original) A method as in claim 2, wherein said number of units to buy and said number of units to sell are weighted with non-unitary weightings.
4. (Original) A method as in claim 3, wherein said non-unitary weightings are based on said swap prices.

5. (Original) A method as in claim 1, wherein said matching based on constrained net activity for said products comprises matching units of orders such that a number of units to buy for a product equals a total volume of units to sell for said product.
6. (Previously Presented) A method as in claim 1, wherein said matching comprises matching units of orders such that a number of units to buy and to sell is maximized.
7. (Original) A method as in claim 6, wherein said number of units to buy and to sell is weighted with non-unitary weightings.
8. (Original) A method as in claim 7, wherein said non-unitary weightings are based on said swap prices.
9. (Original) A method as in claim 1, wherein each of said unilateral orders is irrespective of a price to buy or sell.
10. (Original) A method as in claim 1, wherein at least one participant submits a plurality of unilateral orders.

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11. (Original) A method as in claim 1, wherein said unilateral orders are received electronically via a network.
12. (Original) A method as in claim 1, further comprising the step of determining valuation differences for each participant based on said matched orders and said swap prices.
13. (Previously Presented) A method as in claim 12, wherein said matching comprises minimizing said valuation differences.
14. (Original) A method as in claim 1, further comprising the step of notifying each participant having at least one matched order of said matched order.
15. (Original) A method as in claim 14, wherein each participant is notified electronically via a network.
16. (Original) A method as in claim 1, wherein said matching occurs after expiration of a period for receiving orders.
17. (Original) A method as in claim 16, further comprising a next period for receiving orders, said next period occurring after said matching, wherein orders for said next period

include unmatched orders from said period.

18. (Original) A method as in claim 1, wherein said matching occurs after each order is received.

19. (Original) A method as in claim 1, wherein said matching uses linear programming.

20. (Original) A method as in claim 1, wherein said matching uses quadratic or higher-order programming.

21. (Original) A method as in claim 1, further comprising the step of determining a priority for each order.

22. (Original) A method as in claim 21, wherein said matching further comprises matching of units of said orders based on priorities of said orders.

23. (Original) A method as in claim 22, wherein said matching uses quadratic or higher-order programming.

24. (Original) A method as in claim 22, wherein said matching uses iterative linear

programming to match orders having higher priority over orders having lower priority.

25. (Original) A method as in claim 24, wherein said matching uses heuristics to hot start or cold start iterations of said iterative linear programming.

26. (Currently Amended) A method as in claim 1, wherein said prices are determined based on at least one of current market prices, knowledge of said products, or and at least one ~~one~~ financial model of said products.

27. (Original) A method as in claim 1, further comprising the step of swapping said matched orders and money to obtain swapped orders and swapped money.

28. (Original) A method as in claim 1, wherein said products comprise at least one of commodities, securities, financial contracts, money, and any combination thereof.

29. (Original) A computer for performing the method of claim 1.

30. (Original) A computer-readable medium having software for performing the method of claim 1.

31. (Original) A system for matching orders comprising:
means for receiving a plurality of orders from a plurality of participants to buy and/or sell
a plurality of products, each order being a unilateral order from one of said participants
identifying a number of units of one of said products to buy or sell;
means for setting swap prices for said products; and
means for matching units of said orders based on constrained net activity for said
participants and said products to maximize a volume of units matched to obtain matched orders
and unmatched orders, said matching independent of said swap prices.

32. (Original) A system as in claim 31, wherein said means for matching further
comprises matching of units of said orders based on priorities of said orders.

33. (New) A method as in claim 1, wherein the unilateral orders from at least one
participant are unable to be represented by at least one bilateral order.

34. (New) A method as in claim 1, wherein the unilateral orders from one participant of
said plurality of participants comprises a bucket of unilateral orders for said one participant,
wherein said bucket of unilateral orders for said one participant is unable to be represented by at
least one bilateral order for said one participant.